KAL PAVRUKSH4

KALPAVRUKSHA MODEL SCHOOL

Online class Assignments

Class: X Sub: Chemistry Date: 05.07.2021

Topic: Acids, Bases and Salts

I. Answers for the following questions:

1. What will happen following indicators comes in contact with acid?

a) Methyl orange b) Phenolphthalein c) red litmus d) blue litmus

Ans: a) Methyl orange \rightarrow Red

b) Phenolphthalein → Colourless

c) red litmus \rightarrow No change

d) blue litmus \rightarrow Red

2. What do you observe when dilute acids comes in contact with metals? Explain with 2 balanced chemical equations.

Ans: Dilute acids reacts with metals to form respective salts with the liberation of hydrogen gases.

$$Zn + H_2SO_4 \rightarrow ZnSO_4 + H_2$$

$$Mg + H_2SO_4 \rightarrow MgSO_4 + H_2$$

$$Zn + 2HCl \rightarrow ZnCl_2 + H_2$$

3. What do you observe when acids react with metal carbonates? Explain with 2 balanced chemical equations.

Ans: Acids reacts with metal carbonates to produce salt, water and carbon dioxide gas.

$$Na_2CO_3 + 2HCl \rightarrow 2NaCl + H_2O + CO_2$$

$$MgCO_3 + H_2SO_4 \rightarrow ZnSO_4 + H_2O + CO_2$$

4. What do you observe when acids react with metal bi carbonates? Explain with 2 balanced chemical equations.

Ans: Acids reacts with metal bicarbonates to produce salt, water and carbon dioxide gas.

5. What do you observe when acids react with metallic oxides? Explain with 2 balanced chemical equations.

Ans: Acids reacts with metallic oxides to form salt and water.

Metal oxide + Acid
$$\rightarrow$$
 Salt + Water
CuO + 2HCl \rightarrow CuCl₂ + H₂O
MgO + 2HCl \rightarrow MgCl₂ + H₂O

6. With the help of suitable examples explain neutralization reaction.

Ans: Acids reacts with bases to form salt and water.

Acid + Base
$$\rightarrow$$
 Salt + Water
HCl + NaOH \rightarrow NaCl + H₂O
H₂SO₄ + 2NaOH \rightarrow Na₂SO₄ + H₂O